

--Brief Description Of The Drawings

Figure 2 shows an equivalent circuit diagram of a joint supply conductor of a Nernst electrode and an inner pump electrode of the probe.

Figure 3a shows one embodiment for influencing the resistances of the joint supply conductor according to Figure 2.

Figure 3b shows a second embodiment for influencing the resistances of the joint supply conductor according to Figure 2.

Detailed Description--.

On page 6, line 30, after "3" insert --a--.

On page 8, line 1 change "Patent Claims" to

**--What Is Claimed Is:--**

**In The Claims:**

Please cancel claims 1-5, without prejudice. Please also add new claims 6-12 as follows:

6. (New) A probe for determining an oxygen concentration in a gas mixture, comprising:

a Nernst measuring cell including:

a Nernst electrode exposed to the gas mixture to be measured via a diffusion barrier,

a reference electrode exposed to a reference gas, and

a solid electrolyte body arranged between the Nernst electrode and the reference electrode;

a pump cell including:

an inner pump electrode exposed to the gas mixture via the diffusion barrier,

an outer pump electrode exposed to the gas mixture, and

a solid electrolyte body arranged between the inner pump electrode and the outer pump electrode;

a joint supply conductor section through which the Nernst electrode and the inner pump electrode are connected at least in some sections to a circuit arrangement for controlling and evaluating the probe; and

a joint supply conductor resistor associated with the Nernst electrode and the inner pump electrode and including a loaded voltage divider, the loaded voltage divider including a plurality of resistors that are arranged such that a negative feedback of a Nernst voltage circuit and of a pump voltage circuit is optimized.

7. ☐ (New) The probe according to claim 6, wherein:

the negative feedback of the Nernst voltage circuit and of the pump voltage circuit is maximized.

8. ☐ (New) The probe according to claim 6, wherein:

the gas mixture corresponds to an exhaust gas of an internal combustion engine.

9. ☐ (New) The probe according to claim 6, further comprising:

an additional external resistor connected in series to the joint supply conductor section.

10. ☐ (New) The probe according to claim 6, wherein:

a cross section of the joint supply conductor section is minimized.

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